GRANT SUMMARY

Completed Grant Summaries are made available to the public on the State Water Resources Control Board's (SWRCB) website at http://www.waterboards.ca.gov/funding/grantinfo.html

Use the tab and arrow keys to move through the form. If field is not applicable, please put N/A in field.

Date filled out: June 27, 2007

Grant Information: Please use complete phrases/sentences. Fields will expand as you type.

1. **Grant Agreement Number:** 06-295-559-0

2. **Project Title:** Development of Tools for Hydromodification Assessment and Management

3. **Project Purpose - Problem Being Addressed:** The process of urbanization has the potential to affect stream courses by increasing runoff and sediment yield (i.e. hydromodification). Hydromodification can impact stream habitat and water supply, and can threaten infrastructure. Sediment from channel incision may also contain high phosphorous levels, which can increase the risk of downstream nutrient impairment. Streams in semi-arid regions are more vulnerable to hydromodification than streams in other regions due to a prevalence of sand bed channels and relatively large changes in water and sediment supply during storms. Recent studies indicate that intermittent and ephemeral streams in California begin to degrade when catchment impervious cover is as low as 5%. Managers currently lack straightforward procedures and diagnostic tools to help prioritize streams for protection, to establish objective criteria that will prevent or mitigate hydromodification-associated impairments, and to judge the success of management actions.

4. **Project Goals**

   a. **Short-term Goals:** This project will develop a series of tools that managers can easily apply to implement programs to reduce the effects of hydromodification (i.e. changes in watershed hydrology associated with increased urbanization). The tools will use stream classification, monitoring, field assessment, and simulation modeling to develop three tiers of tools: Screening Tools to allow planners and managers to evaluate whether or not a project is likely to be of concern for hydromodification; Effects Tools to evaluate the expected magnitude or intensity of effect; Mitigation Tools to guide recommended mitigation and management measures. The resultant hydromodification management measures can be used to establish criteria or make recommendations to protect the physical and biological integrity of streams and their associated beneficial uses.

   b. **Long-term Goals:** The project will have lasting benefit by providing tools to facilitate consideration and management of hydromodification into project planning. Lasting benefits will be realized in four ways. First, the tools developed by the project will be available for regulators and managers to establish criteria and guide project design into the future. Second, use of the tools might prevent impacts to natural streams courses that might otherwise have occurred. In this way, the stream courses will receive long-term protection and future impairments may be avoided. Third, monitoring protocols will be available to evaluate stream condition and effectiveness of management measures well beyond the time span of this project. Fourth, this project will allow for the establishment of regional reference conditions against which future projects can be evaluated.

5. **Project Location:** (lat/longs, watershed, etc.) Southern California Coastal Watersheds from Ventura to the Mexico border

   a. **Physical Size of Project:** (miles, acres, sq. ft., etc.) Study sites are distributed throughout Southern California. The products will apply to streams throughout the Southern California region

   b. **Counties Included in the Project:** Ventura, Los Angeles, Orange, Riverside, San Bernardino, San Diego

   c. **Legislative Districts:** (Assembly and Senate) Assembly Districts –34, 35, 36, 37, 38, 39, 40, 41, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 71, 72, 73, 75, 77
   Senate Districts - 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39
   US Congressional District - 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39,40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 52, 53

6. **Which SWRCB program is funding this grant?** Please "X" box that applies.

☐ Prop 13	☐ Prop 40	☒ Prop 50	☐ EPA 319(h)	☐ Other

Grant Contact: Refers to Grant Project Director.

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Grant Time Frame: Refers to the implementation period of the grant.

From: February 1, 2007 **To:** March 1, 2010

Project Partner Information: Name all agencies/groups involved with project. Colorado State University, Fort Collins; Stormwater Monitoring Coalition

Nutrient and Sediment Load Reduction Projection: (If applicable) Reduced hydromodification will result in reductions in sediment load to receiving waters by reducing sediment derived from in-channel erosion.

Please provide a hard copy to your Grant Manager and an electronic copy to your Program Analyst for SWRCB website posting. All applicable fields are mandatory. Incomplete forms will be returned.